



HLA Transition Report to USD(A&T)

**Decision Briefing to the EXCIMS
April 2, 1998**

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<http://www.dmsso.mil>**

Why a Report to USD(A&T)?

- **Directed by USD(A&T) in original policy memo:**
 - "To monitor compliance with the HLA, the DoD Components shall...report...their HLA-compliance intentions for each simulation the Component owns or sponsors..."**
 - "...DMSO shall provide me with periodic reports on the Department's progress towards compliance with the HLA."**
 - "If a Component believes it is impractical for a simulation to comply with the HLA, or that HLA-compliance cannot be achieved in a timely manner, it may submit a waiver request... In consultation with the EXCIMS...I will then decide if an exception to the HLA-compliance requirement is warranted, and if so, the form of that exception."**
- **To comply with action plan approved at 31 Oct 97 EXCIMS**
- **To acquaint Dr. Gansler with the good news of DoD's HLA efforts**
- **To get USD(A&T) approval of our cooperative implementation of HLA policy**

Correspondence Package

The correspondence package (front to back) consists of:

- **EXSUM for Dr. Gansler, with EXCIMS Chair endorsement**
- **Proposed response from Dr. Gansler**
- **One page cover memo from DMSO to USD(A&T) via the EXCIMS, forwarding the report**
- **The 11 page "HLA Transition Report" prepared by the HLA Transition Issues Team (unsigned), with four attachments totaling another 22 pages**
- **Coordination record**

Organization of the Report

- Introduction
- Rationale for HLA Use
- HLA Transition Support
- Definitions to Guide HLA Policy Implementation
- HLA Transition Plans
- Follow-on Actions
- Four attachments
 - 10 Sep 96 Kaminski HLA policy memo
 - List of 451 simulations committed to HLA compliance
 - List of 74 simulations proposed for HLA waivers
 - List of 137 simulations to be retired by Oct 1, 2000

A summary of each section follows

"Introduction"

- **Introduces HLA Transition Issues Team and its central role in fostering a coordinated, common-sense implementation of HLA policy across DoD**
- **Explains this report is the team's product**
- **Provides an overview of report contents**

"Rationale for HLA Use"

- **User needs, and hence simulation representations, are diverse.**
- **Need flexibility to reuse simulations, individually or in combinations, building new only when existing ones cannot satisfy requirements.**
- **Must also be able to flexibly link simulations to live systems for testing, training, COA analysis, mission rehearsal, etc.**
- **DoD therefore needs a flexible, composable approach to constructing simulation environments. That requires interoperability be "built in" to the maximum possible extent.**
- **Report cites interoperability concerns in 1995 Chairman's Program Assessment and FY97 Defense Planning Guidance**
- **HLA satisfies most important consideration for interoperability and reuse, but it is not a "magic wand." Careful planning is still required.**
- **HLA compliance delivers new capabilities and allows the products of different organizations to be wisely used together as user needs dictate, yielding new capabilities without having to build them.**
- **Increasing reuse, saving time, avoiding expense, reducing risk**

"HLA Transition Support"

- **HLA is evolving smartly under the EXCIMS' Architecture Management Group (AMG), with the right players involved**
- **A comprehensive suite of supporting software is being distributed, in the public domain, with full documentation and technical support**
- **Runtime Infrastructure, Object Model Development Tool, Object Model Data Dictionary, Object Model Library**
- **All HLA information is available in the public domain, and COTS products are emerging**
- **A comprehensive education and outreach program is underway**
- **HLA is being established as an IEEE standard and NATO is adopting HLA, yielding more reusable products, a stronger industrial base and more opportunities for international cooperation**
- **User-friendly compliance testing capability is in place**

"Definitions to Guide HLA Policy Implementation" (1 of 2)

Report requests USD(A&T) approval for seven working definitions to guide the implementation of HLA policy:

1 "DoD Simulations"

- HLA policy applies to all simulations, including simulators, but does not apply to models (by the DoD definition, not their name)**
- does not mean:**
 - the internal components of a simulation**
 - Part Task Trainers (carefully defined)**
 - stimulators used only for production line quality control or diagnostic testing**
- if a system is not a simulation, it need not be reported**

2 "Simulation Projects and Programs"

3 "Development or Modification"

"Definitions to Guide HLA Policy Implementation" (2 of 2)

4 "Retire"

5 "Own or Sponsor"

- includes providing funding, paying a license fee

6 "Certificate of Compliance"

- common process administered by MSOSA under DMSO guidance

7 "Waiver Submittal"

- through Component M&S management offices to DMSO
- DMSO will then coordinate across the DoD Components and process a recommendation to EXCIMS and USD(A&T)

"HLA Transition Plans"

Three categories are discussed in body of report; the specific simulations are listed in attachments

- **"Simulations Committed to HLA Compliance"**
 - 451 simulations
 - for information only; omission does not mean need not comply
- **"Simulations Recommended for Waiver from HLA Compliance"**
 - 74 simulations (45 of which will be retired, but after Oct 1, 2000)
 - requires a USD(A&T) decision to waive
 - careful investigation; characteristics discussed on next slide
 - extensions to "no can pay" and "no can play" are indefinite
 - list will be reviewed annually; waiver can be recommended for withdrawal if circumstances change
 - waivers don't automatically apply to successors or similar simulations
- **"Simulations to be Retired by Oct 1, 2000"**
 - 137 simulations; will not transition to HLA
 - for information only

Distinguishing Characteristics of Simulations Recommended for Waivers

- Simulations with a planned and programmed replacement which will not be available prior to the “no can play” date of October 1, 2000.
- Simulations of systems that are scheduled to be retired from the operational inventory by October 1, 2002.
- Parametric assessments in design simulations.
- Simulations whose decidedly infrequent projected use of only once or twice annually does not justify the cost of HLA-compliance.
- Simulations that are commercial off the shelf (COTS), licensed or proprietary, were built primarily for other than DoD-customers, and over which DoD has no effective leverage to achieve compliance.
- Simulations whose national security circumstances/risks preclude federation.
- Simulations whose only computational platforms are obsolete and for which source code is no longer available.
- Simulations of systems where the systems themselves are used exclusively for training and not intended to perform any other operational mission (e.g., training aircraft such as the T-45).

Each case must be examined; these are not precise criteria and will evolve

"Follow-On Actions"

- **Component M&S management offices will convey USD(A&T) waiver decisions to the appropriate organizations.**
- **DMSO will post this HLA Transition Report and the USD(A&T) response on the Internet, providing an integrated package of HLA policy and its implementation.**
- **In the fall, the HLA Transition Issues Team will forward another recommendation regarding those simulations committed to HLA compliance, but whose circumstances warrant a time extension to achieve this.**

EXCIMS Decision

"Does the EXCIMS concur with this report and recommend it be forwarded to USD(A&T) for approval?"

Subsequent USD(A&T) Action

- **On April 7th, Dr. Gansler:**
 - **approved the report in its entirety (including definitions and waivers)**
 - **described the HLA as a masterful achievement**
 - **noted importance of quickly transitioning legacy simulations**
 - **stated his commitment to the HLA policy and insistence the Components plan and program accordingly**
 - **encouraged industry to follow suit**
 - **thanked the EXCIMS and HLA Transition Issues Team**